

SUMMARY

5 A process for production of unsaturated fatty acid-containing oils which is characterized by culturing a microorganism belonging to the genus *Mortierella* subgenus *Mortierella* in a medium containing a nitrogen source derived from soybean, and collecting the unsaturated fatty acid-containing oil from the cultured product. The oils are obtained with a low 24,25-methylenecholest-5-en-3 β -ol content.